Comments at Closeout of PDG Advisory Committee - 2010

On Friday 19 November, we had a very interesting and fruitful collaboration meeting. Then on Saturday we had a highly successful Advisory Committee meeting. They were very impressed with the progress made in the past two years. As usual, they will have a set of recommendations. During close-out, I took notes so that I can give you an early idea of what they will recommend when they write their report. The report will be more accurate than my notes.

The Committee congratulates the PDG Collaboration on a very successful production of the Book etc. They were very impressed by the success of the 2008 DOE review in Washington DC. They feel the Computing upgrade is going very well. They are very happy with the Listings and wish us to continue as we are. Most of the comments therefore concern review articles. They did suggest a 3rd literature scanner (as proposed by Charles Wohl) to look at related articles from cosmology.

The Committee noted that we are preparing a review article on Event Generators for Colliders, and suggested a short review on event generators for accelerator-based neutrino experiments, such as that at: http://projects.hepforge.org/genie/

Another suggestion was a table that would list neutrino beams that are represented in the rest of the Book. This could be similar in spirit (but perhaps shorter) to the table about colliders.

Also about neutrinos was a suggestion to there be more emphasis in the general review about low energy neutrinos, total and quasi-elastic cross-sections, and cosmological limits.

They very much liked the new QCD review. They recommended adding text about neutrino deep-inelastic scattering (similar to that for charged-lepton DIS). They "suggest that a short segment be added to the very good QCD review on neutrino DIS, introducing F_3 and maybe referencing some experimental results."

They suggest short reviews or introductions on Lattice QCD, Heavy-Flavor Effective Theory, and Soft-Collinear Effective Theory. They said: "The latter deserve to be on a similar footing of importance, in part because we are not aware of many introductions to these topics. Depending on the authors, we think there might be two or three reviews."

In the future, they think the Structure Function section should have a short section on Generalized Parton Distributions (short overview and point to other introductions).

They had some suggestions about the Higgs and Electroweak reviews, which have been separately communicated to those authors (just some improvements).

On the Dark Matter review, they propose more coverage of direct detection measurements, bounds, etc.

They urged us to be sure there is a single value in RPP quoted for alpha_s, and in particular that the authors (and overseers) of the Electroweak and QCD reviews communicate about this to be sure it happens. Perhaps a one-day workshop on this would be useful.

On the Technicolor review mentioned discussion of Higgsless models and Warped Extra Dimensions, with cross-linking to other reviews in RPP.

They would like us to work on making reviews shorter.

They are pleased with our cosmology coverage in general.

Following our discussions on how we approach the LHC era where we may find new limits, or evidence for unspecified new physics, or even discoveries, they wish us to have a strategy for handling new results. They emphasized that we should not appear to have a one-sided discussion of interpretations of new results, and no appearance of partiality. They point out the possible high rate of publication from LHC experiments, and also that these results will be more complex.

They want all review authors to be aware that reviews and mini-reviews (unlike the Listings) can have preliminary data as long as they are approved by the collaboration and appear in print somewhere.

They suggest that in choosing a publisher that past performance should be a declared factor. They did not seem to feel that a journal's impact in HEP should be a big factor in choosing a publisher.

They were quite concerned that CERN ran out of Booklets very quickly and urged better planning and coordination.